

## APPENDIX I:

SPECIFICATION AMENDMENTS:

Amend pages 26, 33 and 34 of the specification as set forth the following:

On page 26:

- Delete the paragraph beginning in indicated line 4 and ending in indicated line 6 and insert in its stead:

At a reactor temperature of 255°C, a pressure of 5 bar and a catalyst hourly space velocity of 0.27 kg/L<sub>cath</sub> at a hydrogen: MA molar ratio of 85:1, a reaction effluent of the composition: 91% of GBL, 5% of THF, 1% of BDO and 1% of ~~BSA~~ SA

On pages 33 and 34:

- Delete the text beginning on page 33 in indicated line 4 and ending on page 34 in indicated line 2 and insert in its stead:

~~The present invention relates to a process for preparing optionally~~  
Optionally alkyl-substituted 1,4-butanediol is prepared from C<sub>4</sub>-dicarboxylic acids and/or of derivatives thereof by two-stage catalytic hydrogenation in the gas phase of C<sub>4</sub>-dicarboxylic acids and/or of derivatives thereof having the following steps:

- a) ~~catalytically hydrogenating introducing~~ a gas stream of a the C<sub>4</sub>-dicarboxylic acid or ~~of a the~~ derivative thereof ~~at from 200 to 300°C and from 2 to 60 bar into~~ in a first reactor and ~~catalytically hydrogenating it~~ in the gas phase to obtain a product which contains mainly optionally alkyl-substituted  $\gamma$ -butyrolactone;
- b) removing succinic anhydride from the product of ~~obtained in step a), preferably to a residual level of from < about 0.3 to 0.2% by weight;~~
- c) catalytically hydrogenating ~~introducing~~ the product stream ~~obtained in of step b) in into~~ a second reactor ~~at a temperature of from 150°C to 240°C and a pressure of from 15 to 100 bar and catalytically hydrogenating it~~ in the gas phase to obtain optionally alkyl-substituted 1,4-butanediol;

- d) removing the desired product from intermediates, by-products and any unconverted reactants; and
- e) optionally recycling unconverted intermediates into one or both hydrogenation stages<sub>7,1</sub>

The catalysts employed in each of the said hydrogenation stages  
~~each using a catalyst which comprises~~ comprise  $\leq 95\%$  by weight, preferably from 5 to 95% by weight, in particular from 10 to 80% by weight, of CuO, and  $\geq 5\%$  by weight, preferably from 5 to 95% by weight, in particular from 20 to 90% by weight, of an oxidic support, and said the second reactor ~~having~~ has a higher pressure than ~~said the~~ first reactor.